The invention claimed is:

1. A suspension system for suspending a vehicle frame above a plurality of ground-engaging wheels, comprising:

a wheel-carrying axle comprising a first end and a second end;

a pair of frame bracket assemblies each comprising a resiliently-bushed pivotable connection defining a pivot axis, the frame bracket assemblies operably coupled to opposite sides of the vehicle frame, the resiliently-bushed pivotable connection comprising a substantially cylindrically shaped bushing; and

a pair of trailing arms each comprising a first end operably coupled to the first end and the second end of the axle, respectively, and a second end comprising an aperture that receives the bushing of one of the frame bracket assemblies therein, wherein the aperture of the second end of each trailing arm is nonsymmetrical, thereby causing a nonsymmetrical compression of the bushing about the pivot axis.

2. The suspension system of claim 1, wherein the aperture of the second end of each trailing arm is parabolically shaped.

3. The suspension system of claim 2, wherein the aperture is oriented so as to apply a greater compression in a substantially horizontal direction than in a substantially vertical direction.

4. A suspension system for suspending a vehicle frame above a plurality of ground-engaging wheels, comprising:

a wheel-carrying axle comprising a first end and a second end;

a pair of frame bracket assemblies each comprising a resiliently-bushed pivotable connection, the frame bracket assemblies operably coupled to opposite sides of the vehicle frame, the resiliently-bushed pivotable connection comprising an elastically deformable bushing; and

a pair of trailing arms each comprising a first end operably coupled to the first end and the second end of the axle, respectively, and a second end comprising an aperture that receives the bushing of one of the frame bracket assemblies therein, the aperture defining an inner surface, wherein the inner surface is nonuniform, thereby reducing rotation of the bushing with respect to the trailing arm.

5. The suspension system of claim 4, wherein the inner surface is roughed.

6. The suspension system of claim 5, wherein the inner surface comprises a plurality of teeth.

7. A suspension system for suspending a vehicle frame above a plurality of ground-engaging wheels, comprising:

a wheel-carrying axle comprising a first end and a second end;

a pair of frame bracket assemblies each comprising a frame bracket and a resiliently-bushed pivotable connection, the frame bracket assemblies operably coupled to opposite sides of the vehicle frame; and

a pair of trailing arms each comprising a first end operably coupled to the first end and the second end of the axle, respectively, and a second end comprising an aperture that receives the resiliently-bushed pivotable connection of one of the frame bracket assemblies therein, wherein the second end of each trailing arm comprises a first thickness across a width thereof and a second thickness located proximate the frame bracket that is greater than the first thickness.

8. The suspension system of claim 7, wherein the second end of each trailing arm is cylindrically shaped.

9. The suspension system of claim 8, wherein a radius of the second end corresponding to the second thickness is greater than a radius of the second end corresponding to the first thickness.

10. A suspension system for suspending a vehicle frame above a plurality of ground-engaging wheels, comprising:

a wheel-carrying axle comprising a first end and a second end;

a pair of frame bracket assemblies each comprising a resiliently-bushed pivotable connection, the frame bracket assemblies operably coupled to opposite sides of the vehicle frame, the resiliently-bushed pivotable connection comprising an elastically deformable bushing; and

a pair of trailing arms each comprising a first end comprising a mating surface operably coupled to the first end and the second end of the axle, respectively, and a

second end comprising an aperture that receives the resiliently-bushed pivotable connection of one of the frame bracket assemblies therein, wherein the mating surface of the first end of each of the trailing arms comprises a cavity, thereby reducing a localized stress transferred from the trailing arms to the axle.

11. The suspension system of claim 10, wherein the cavity is substantially circularly shaped.

12. A suspension system for suspending a vehicle frame above a plurality of ground-engaging wheels, comprising:

a wheel-carrying axle comprising a first end and a second end;

a pair of frame bracket assemblies each comprising a resiliently-bushed pivotable connection defining a pivot axis, the frame bracket assemblies operably coupled to opposite sides of the vehicle frame, the resiliently-bushed pivotable connection comprising a substantially cylindrically shaped bushing; and

a pair of trailing arms each comprising a first end operably coupled to the first end and the second end of the axle, respectively, and a second end comprising an aperture that receives the bushing of one of the frame bracket assemblies therein, the second end of each trailing arm further comprising a lip extending radially outward from the aperture and at least one engagement surface extending radially outward from the lip and adapted to abut a bushing-removal tool.

13. The suspension system of claim 12, wherein each trailing arm comprises a single-cast piece.

14. The suspension system of claim 12, wherein the at least one engagement surface includes a first pair of engagement surfaces, and a second pair of engagement surfaces, wherein the first pair of engagement surfaces extending radially outward in a direction substantially towards the first end of the trailing arm, and wherein the second pair of engagement surfaces extend radially outward in a direction substantially away from the first end of the trailing arm.

15. The suspension system of claim 12, wherein each of the engagement surfaces includes an aperture extending therethrough.

16. A suspension system for suspending a vehicle frame above a plurality of ground-engaging wheels, comprising:

a wheel-carrying axle comprising a first end and a second end;

a pair of frame bracket assemblies operably coupled to opposite sides of the vehicle frame; and

a pair of shock absorbers each comprising a first end operably coupled to the vehicle frame and a second end; and

a pair of trailing arms each comprising a first end operably coupled to the first end and the second end of the axle, respectively, a second end operably coupled to one of the frame bracket assemblies, and an outwardly extending shock support tang

operably coupled to one of the shock absorbers, wherein each of the trailing arms comprises a single-cast piece.

17. The suspension system of claim 16, wherein the shock support tang is located proximate the first end of the trailing arm.

18. A suspension system for suspending a vehicle frame above a plurality of ground-engaging wheels, comprising:

a wheel-carrying axle comprising a first end and a second end;

a pair of frame bracket assemblies operably coupled to opposite sides of the vehicle frame;

a pair of air springs each comprising a flexible boot; and

a pair of trailing arms each comprising a first end operably coupled to the first end and the second end of the axle, respectively, a second end operably coupled to one of the frame bracket assemblies, and a top surface comprising a first portion and a second portion, wherein the second portion is adapted to support one of the air springs thereon, and wherein the second portion extends above the first portion, thereby substantially reducing an amount of contact between the trailing arm and the boot of the air spring when the air spring is in a deflated condition.

19. The suspension system of claim 18, wherein each trailing arm is provided an I-beam shaped cross sectional configuration along a length thereof comprising a top

flange, a middle web section and a bottom flange, and wherein the top flange includes the first portion and the second portion of the top surface of each trailing arm.

20. The suspension system of claim 18, wherein each trailing arm comprises a single-cast piece.

21. A suspension system for suspending a vehicle frame above a plurality of ground-engaging wheels, comprising:

a wheel-carrying axle comprising a first end and a second end;

a pair of frame bracket assemblies operably coupled to opposite sides of the vehicle frame;

a pair of trailing arms each comprising a first end operably coupled to the first end and the second end of the axle, respectively, and a second end operably coupled to one of the frame bracket assemblies, wherein the first end of each trailing arm comprises a tube-shaped portion having a slot extending along a length thereof for receiving the axle therein during assembly; and

a pair of spacer assemblies each operably coupled with the trailing arms and spanning the slot of the first end, thereby reducing an amount of flexure of each trailing arm proximate the coupling between the trailing arm and the axle.

22. A suspension system for suspending a vehicle frame above a plurality of ground-engaging wheels, comprising:

a wheel-carrying axle comprising a first end and a second end;

a pair of frame bracket assemblies each comprising a resiliently-bushed pivotable connection defining a pivot axis, the frame bracket assemblies operably coupled to opposite sides of the vehicle frame, the resiliently-bushed pivotable connection comprising a substantially cylindrically shaped bushing; and

a pair of trailing arms each comprising a first end operably coupled to the first end and the second end of the axle, respectively, and a second end comprising an aperture that receives the bushing of one of the frame bracket assemblies therein, the second end of each trailing arm further comprising a lip extending radially outward from the aperture wherein each trailing arm comprises a single-cast piece.

23. The suspension system of claim 22, wherein the aperture of the second end of each trailing arm is nonsymmetrical, thereby causing a nonsymmetrical compression of the bushing about the pivot axis.

24. The suspension system of claim 23, wherein the aperture of the second end of each trailing arm is parabolically shaped.

25. The suspension system of claim 24, wherein the aperture is oriented so as to apply a greater compression in a substantially horizontal direction than in a substantially vertical direction.

26. The suspension assembly of claim 23, wherein the aperture of the second end defines a nonuniform inner surface, thereby reducing rotation of the bushing with respect to the trailing arm.

27. The suspension system of claim 26, wherein the inner surface is roughed.

28. The suspension system of claim 27, wherein the inner surface comprises a plurality of teeth.

29. The suspension system of claim 26, wherein the second end of each trailing arm comprises a first thickness across a width thereof and a second thickness located proximate the frame bracket that is greater than the first thickness.

30. The suspension system of claim 29, wherein the first end of each trailing arm comprises a mating surface operably coupled to the first and second ends of the axle, and wherein the mating surface of the first end of each of the trailing arms comprises a cavity, thereby reducing a localized stress transferred from the trailing arms to the axle.

31. The suspension system of claim 30, wherein each trailing arm further comprises a lip extending radially outward from the lip and is adapted to abut a bushing-removal tool.